CLAIMS

1. A method for calibrating at least one or more amplifiers (100,200),
c h a r a c t e r i s e d in:
i) generating a noise signal (N_a+N_i) produced by said one or more amplifiers (100,200) when no input signal (S_i+N_i) is connected (Alt. 2) to at least one amplifier of said one or more amplifiers (100,200);
ii) using said noise signal (N_a+N_i) as a calibrating signal for estimating a corresponding gain (G) of said one or more amplifiers (100,200) by measuring (600) at least one output of said one or more amplifiers (100,200) the amount of noise (S_{tot}) of said one or more amplifiers (100,200).

2. A method for calibrating at least one or more amplifiers (100,200) according to claim 1,
c h a r a c t e r i s e d in that further is said gain (G) adjusted in accordance with said calibrating signal.

3. A method for calibrating a receiver (1,2),
c h a r a c t e r i s e d in:
i) generating a noise signal (N_a+N_i) produced by one or more amplifiers (100,200) of said receiver when an input signal (S_i+N_i) is disconnected (Alt. 2) to said receiver;
ii) using said noise signal (N_a+N_i) as a calibrating signal for estimating a corresponding gain (G) of said one or more amplifiers in said receiver by measuring (600) at the output of the receiver the amount of noise (S_{tot}) of said one or more amplifiers (100,200).

4. A method for calibrating a receiver according to claim 3,
c h a r a c t e r i s e d in that further is said gain (G) adjusted in accordance with said calibrating signal.

5. A calibration arrangement (1,2) comprising:
one or more amplifiers (100,200) for amplifying a radio signal (S_i+N_i);
estimating means (600) for estimating a gain (G) of said one or more amplifiers (100,200);
c h a r a c t e r i s e d in that disconnecting said radio signal (S_i+N_i), while at least one amplifier of said one or more amplifiers (100,200) is producing a calibrating signal (N_a+N_i) as a reference signal into said estimating means (600) for estimating said gain (G) of said radio signal (S_i+N_i).

6. A calibration arrangement (1,2) comprising:
one or more amplifiers (100,200) for amplifying a radio signal (S_i+N_i);
estimating means (600) for estimating a gain (G) of said one or more amplifiers (100,200);
c h a r a c t e r i s e d in that said calibration arrangement (1,2) further comprises:
a switching means (10,30+100) for disconnecting said radio signal (S_i+N_i), while at least one amplifier of said one or more amplifiers (100,200) is producing a calibrating signal (N_a+N_i) as a reference signal into said estimating means (600) for estimating said gain (G) of said radio signal (S_i+N_i).

7. A calibration arrangement (1,2) according to any one of claims 5-6,
c h a r a c t e r i s e d in that said calibrating signal is a pure noise signal (N_a+N_i) of at least one amplifier of said one or more amplifiers (100,200).

8. A calibration arrangement (2) according to any one of claims 5-7,
c h a r a c t e r i s e d in that disconnecting said one or more amplifiers (100,200) from said radio signal (S_i+N_i) by disconnecting a power supply (500) from at

least one amplifier of said one or more amplifiers (100,200).

9. A calibration arrangement (2) according to any one of claims 6-7,
c h a r a c t e r i s e d in that said switching means (30+100) is disconnecting said one or more amplifiers (200) from said radio signal (S_i+N_i) by disconnecting a power supply (500) from at least one amplifier of said one or more amplifiers (100,200).

10. A calibration arrangement (1) according to any one of claims 5-7,
c h a r a c t e r i s e d in that disconnecting said one or more amplifiers (100,200) from said radio signal (S_i+N_i) by connecting at least one input of said one or more amplifiers (100,200) to a reference potential (20).

11. A calibration arrangement (1) according to any one of claims 6-7,
c h a r a c t e r i s e d in that said switching means (10) is disconnecting said one or more amplifiers (200) from said radio signal (S_i+N_i) by connecting at least one input of said one or more amplifiers (100,200) to a reference potential (20).

12. A calibration arrangement (1) according to any one of claims 10-11,
c h a r a c t e r i s e d in that said reference potential is a resistance (20) through ground.

13. A calibration arrangement (1,2) according to any one of claims 5-12,
c h a r a c t e r i s e d in that the calibration arrangement (1,2) further comprises:
more than one amplifiers (100+200) in a chain for amplifying said received radio signal (S_i+N_i).

14. A calibration arrangement (1,2) according to any one of claims 6-7,
c h a r a c t e r i s e d in that said switching means (10,30+100) is disconnecting said one or more amplifiers (100,200) from said radio signal (S_i+N_i) by disconnecting at least one input of said one or more amplifiers (100,200) which is closest to where said radio signal (S_i+N_i) is inputted.

15. A calibration arrangement (1,2) according to any one of claims 5-14,
c h a r a c t e r i s e d in that said calibrating signal is a noise power (kTBF) from said one or more amplifiers (100,200) that comprises:
a known Boltzman constant (k);
a known bandwith (B) of said noise power;
a known noise figure of said noise power;
a measured temperature (T) of said receiver.

16. A calibration arrangement (1,2) according to any one of claims 5-15,
c h a r a c t e r i s e d in that an output from the last one of said one or more amplifiers (100,200) in a chain is connected to an analog-digital-converter (400) for converting analog signals into digital signals.

17. A calibration arrangement (1,2) according to claim 15,
c h a r a c t e r i s e d in that said gain (G) of said radio signal (S_i+N_i) is estimated from said calibrating signal (N_a+N_i) including said noise power (kTBF) when an output signal (S_{tot}) is measured at least one output of said one or more amplifiers (100,200).

18. A calibration arrangement (1,2) according to any one of claims 5-16,
c h a r a c t e r i s e d in that said gain (G) of said radio signal (S_i+N_i) is estimated from said calibrating

signal (N_a+N_i) when an output signal (S_{tot}) is measured at least one output of said one or more amplifiers (100,200).

19. A calibration arrangement (1,2) according to any one of claims 15-16,
c h a r a c t e r i s e d in that said gain (G) of said radio signal (S_i+N_i) is estimated from said calibrating signal (N_a+N_i) when an output signal (S_{tot}) is measured after said analog-digital-converter (400).

20. A receiver (1,2) comprising:
means (300) for receiving a radio signal (S_i+N_i);
one or more amplifiers (100,200) for amplifying said received radio signal (S_i+N_i);
estimating means (600) for estimating a gain (G) of said receiver (12);
c h a r a c t e r i s e d in that said receiver further comprises:
a switching means (10,100) for disconnecting said received signal (S_i+N_i), while at least one amplifier of said one or more amplifiers (100,200) is producing a calibrating signal (N_a+N_i) as a reference signal into said estimating means (600) for estimating said gain (G) of said radio signal (S_i+N_i).

21. A receiver (1,2) according to claim 20,
c h a r a c t e r i s e d in that said calibrating signal is a pure noise signal (N_a+N_i) of at least one amplifier of said one or more amplifiers (100,200).

22. A receiver (1) according to any one of claims 20-21,
c h a r a c t e r i s e d in that said switching means (10) is disconnecting said radio signal (S_i+N_i) by connecting at least one input of said one or more amplifiers (100) to a reference potential (20).

23. A receiver (1) according to claim 22, characterised in that said reference potential is a resistance (20) through ground.

24. A receiver (2) according to any one of claims 20-21, characterised in that said switching means (100) is disconnecting said one or more amplifiers (100,200) from said radio signal (S_i+N_i) by disconnecting a power supply (500) from at least one amplifier of said one or more amplifiers (100,200).

25. A receiver (1,2) according to any one of claims 20-24, characterised in that the receiver (1,2) further comprises:
more than one amplifiers (100+200) in a chain for amplifying said received radio signal (S_i+N_i).

26. A receiver (1,2) according to any one of claims 20-25, characterised in that said calibrating signal is a noise power (kTBF) from said one or more amplifiers (100,200) that comprises:
a known Boltzman constant (k);
a known bandwith (B) of said noise power;
a known noise figure of said noise power;
a measured temperature (T) of said receiver.

27. A receiver (1,2) according to any one of claims 20-26, characterised in that an output from the last one of said one or more amplifiers (200) in a chain is connected to an analog-digital-converter (400) for converting analog signals into digital signals.

28. A receiver (1,2) according to claim 26, characterised in that said gain (G) of said received radio signal (S_i+N_i) is estimated from said calibrating signal (N_a+N_i) including said noise power (kTBF) when an output signal (S_{tot}) is measured at least one output of said one or more amplifiers (100,200).

29. A receiver (1,2) according to any one of claims 20-27, c h a r a c t e r i s e d in that said gain (G) of said received radio signal (S_i+N_i) is estimated from said calibrating signal (N_a+N_i) when an output signal (S_{tot}) is measured at least one output of said one or more amplifiers (100,200).

30. A receiver (1,2) according to any one of claims 20-27, c h a r a c t e r i s e d in that said gain (G) of said received radio signal (S_i+N_i) is estimated from said calibrating signal (N_a+N_i) when an output signal (S_{tot}) is measured after said analog-digital-converter (400).